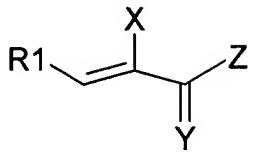
WHAT IS CLAIMED IS:

1. Compounds of the general formula C1



C1

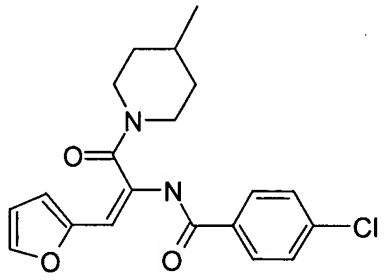
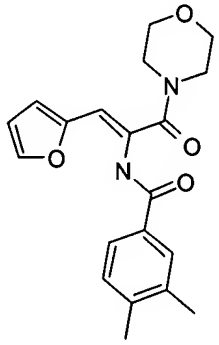
wherein

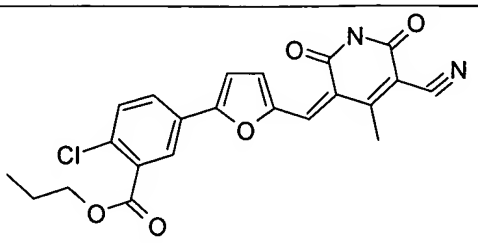
- X and Z may be identical or different and, independent of each other, are selected from the group consisting of hydroxy, thiol, C_1- to C_{12} alkoxy, C_1- to C_{12} alkylthio, unsubstituted or substituted, uncondensed or condensed aryl, cycloalkyl and amino (NH_2, NHR^2, NR^2R^3) optionally containing one or several hetero atoms from the group of N, O, P and S;
- Y represents O, S or NR4;
- R1, R2, R3 and R4 may be identical or different and are selected from the group consisting of hydrogen, unsubstituted or substituted, straight chain or branched C_1- to C_{12} alkyl, C_2- to C_{12} alkenyl and C_2- to C_{12} alkynyl, hydroxy, thiol, C_1- to C_{12} alkoxy, C_1- to C_{12} alkylthio unsubstituted or substituted, uncondensed or condensed, aryl and cycloalkyl optionally containing one or several hetero atoms from the group of N, O, P and S, unsubstituted or substituted amino, unsubstituted or substituted carbonyl, unsubstituted or substituted thiocarbonyl and unsubstituter or substituted imino; and
- the heteroaromatic or heterocyclic residues are bound to the basic structure of the general formula C1 via a C atom or a heteroatom;

and tautomers, stereoisomers of the compounds of the general formula C1 and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof, for use in the medical field.

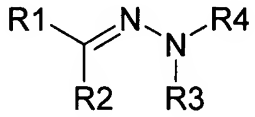
2. The compounds of the general formula C1 according to claim 1 for use in the medical field, namely compounds selected, for example, but not exclusively, from the following group C1 according to Table 1, and tautomers, stereoiso-mers of said compounds and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof:

Table 1:

Compound ID.	**Structure**
C1.001	
C1.002	

C1.003	

3. Compounds of the general formula C2



C2

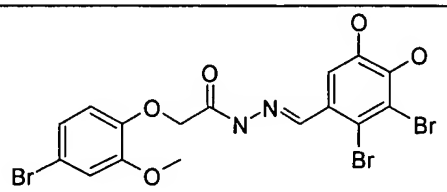
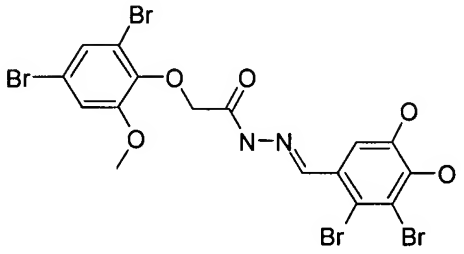
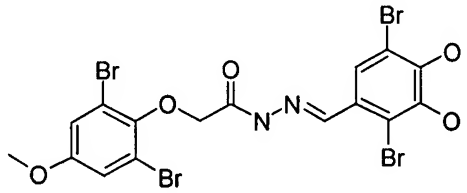
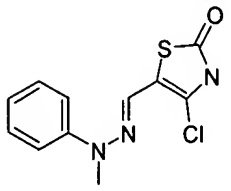
wherein

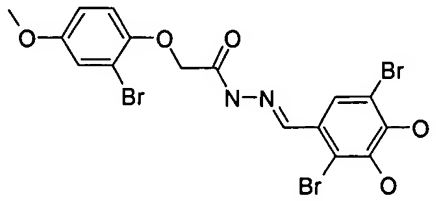
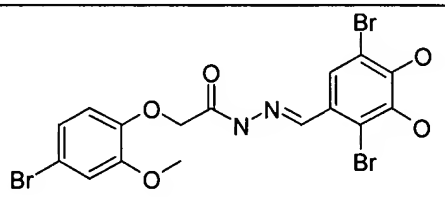
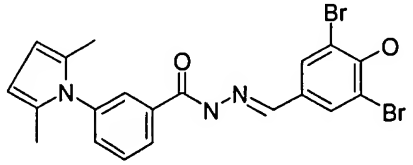
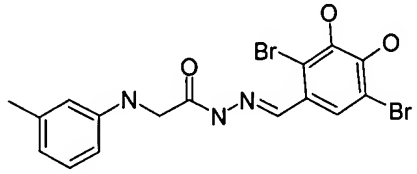
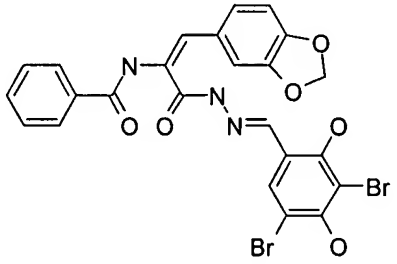
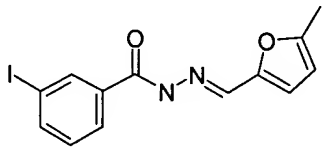
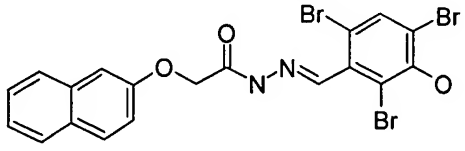
- R1 to R4 may be identical or different and are selected from the group consisting of hydrogen, unsubstituted or substituted, straight chain or branched C_1- to C_{12} alkyl, C_2- to C_{12} alkenyl and C_2- to C_{12} alkynyl, hydr-oxy, thiol, C_1- to C_{12} alkoxy, C_1- to C_{12} alkylthio, unsubstituted or substituted, uncondensed or condensed aryl or cycloalkyl optionally containing one or several hetero atoms from the group N, O, P and S, unsubstituted or substituted amino, unsubstituted or substituted carbonyl, unsubstituted or substituted thiocarbonyl and unsubstituted or substituted imino; and
- the heteroaromatic or heterocyclic residues are bound to the basic structure having the general formula C2 via a C atom or a hetero atom;

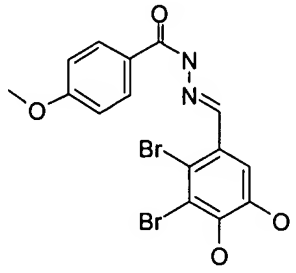
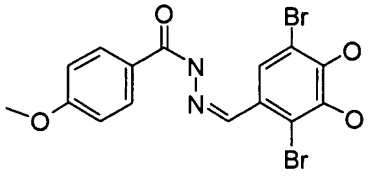
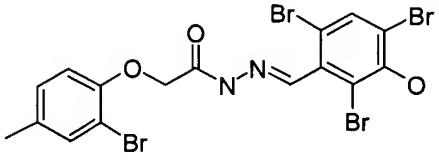
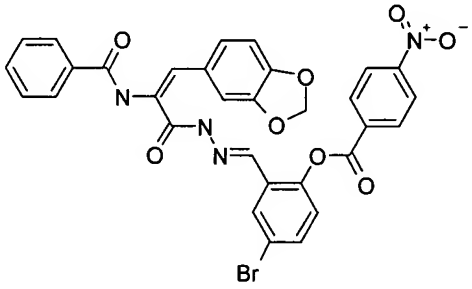
and tautomers, stereoisomers of the compounds of the general formula C2 and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof, for use in the medical field.

4. The compounds of the general formula C2 according to claim 3 for use in the medical field, namely compounds selected, for example, but not exclusively, from the following group C3 according to Table 2, and tautomers, stereoisomers of said compounds and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof:

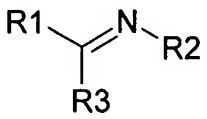
Table 2:

Compound ID.	**Structure**
C2.001	
C2.002	
C2.003	
C2.004	

C2.005	
C2.006	
C2.007	
C2.008	
C2.009	
C2.010	
C2.011	

C2.012	
C2.013	
C2.014	
C2.015	

5. Compounds of the general formula C3



C3

wherein

- R1, R2 and R3 may be identical or different and are selected from the group consisting ofhydrogen, unsubstituted or substituted, straight chain or branched C_1- to C_{12} alkyl, C_2- to C_{12} alkenyl and C_2- to C_{12} alkynyl, hydr-oxy,

thiol, C_1- to C_{12} alkoxy, C_1- to C_{12} alkylthio, unsubstituted or substituted, uncondensed or condensed aryl and cycloalkyl optionally containing one or several hetero atoms from the group N, O, P und S, unsubstituted or substituted amino, unsubstituted or substituted carbonyl, unsubstituted or substituted thiocarbonyl and unsubstituted or substituted imino; and

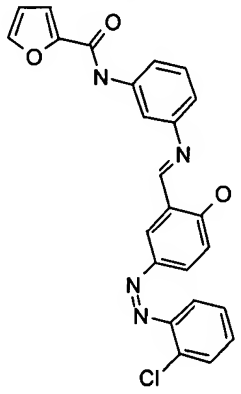
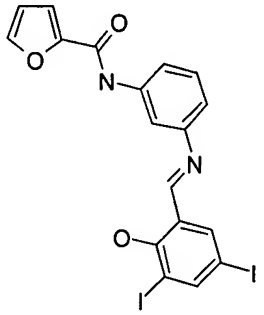
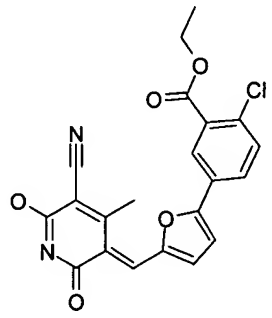
- the heteroaromatic or heterocyclic residues are bound to the basic structure having the general formula C3 via a C atom or a hetero atom;

and tautomers, stereoisomers of the compounds of the general formula C3 and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof, for use in the medical field.

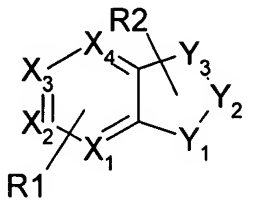
6. The compounds of the general formula C3 according to claim 5 for use in the medical field, namely compounds selected, for example, but not exclusively, from the following group C3 according to Table 3, and tautomers, stereoisomers of said compounds and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof:

P29679.S01

Table 3:

Compound ID.	Structure
C3.001	
C3.002	
C3.004	

7. Compounds of the general formula C4



C4

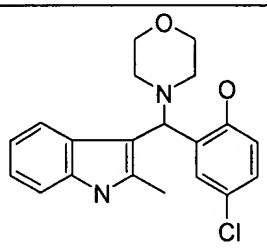
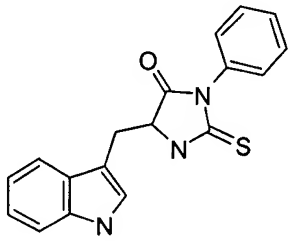
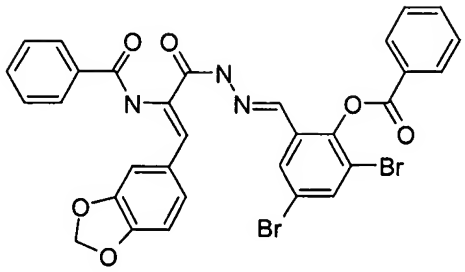
wherein

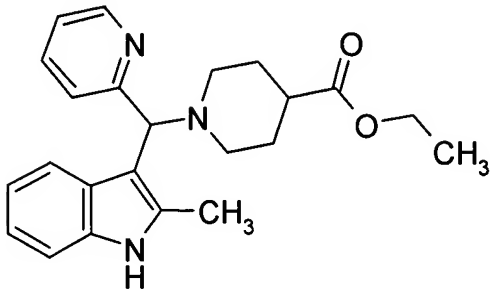
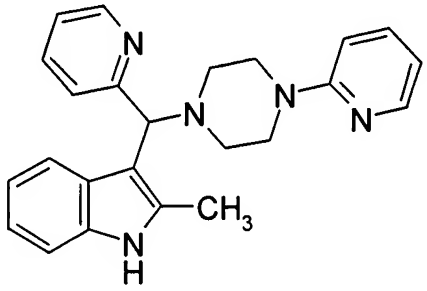
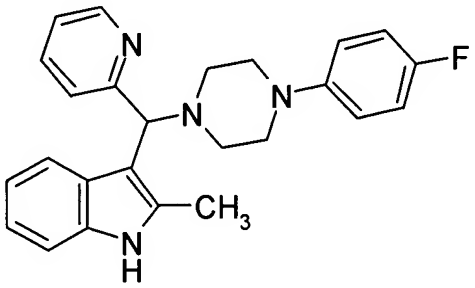
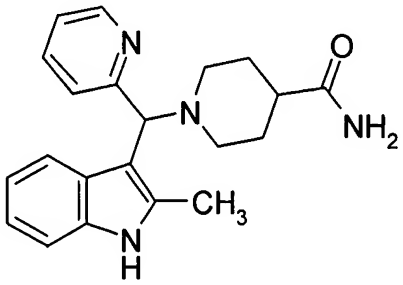
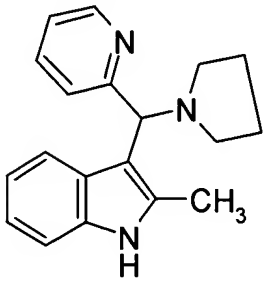
- X1, X2, X3 and X4 may be identical of different and represent CH oder CR3 units;
- Y1, Y2 and Y3 may be identical or different and represent substituted or unsubstituted carbon atom or hetero atom units with the ring atoms N, O, P or S;
- R1 and R2 symbolize the substitution pattern of the respective partial ring, wherein R1 represents one to four identical or different substituents and R2 represents one to six identical or different substituents and are selected from the group consisting of hydrogen, unsubstituted or substituted, straight chain or branched C_1- to C_{12} alkyl, C_2- to C_{12} alkenyl and C_2- to C_{12} alkynyl, hydroxy, thiol, C_1- to C_{12} alkoxy, C_1- to C_{12} alkylthio, unsubstituted or substituted, uncondensed or condensed aryl and cycloalkyl optionally containing one or several hetero atoms from the group N, O, P and S, unsubstituted or substituted amino, unsubstituted or substituted carbonyl, unsubstituted or substituted thiocarbonyl and unsubstituted or substituted imino; and
- the heteroaromatic or heterocyclic residues are bound to the basic structure having the general formula C4 via a C atom or a hetero atom;

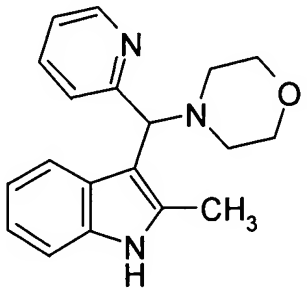
and tautomers, stereoisomers of the compounds of the general formula C4 and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof, for use in the medical field.

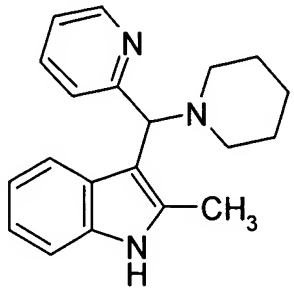
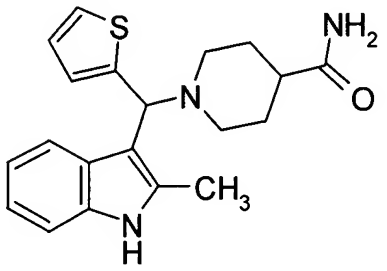
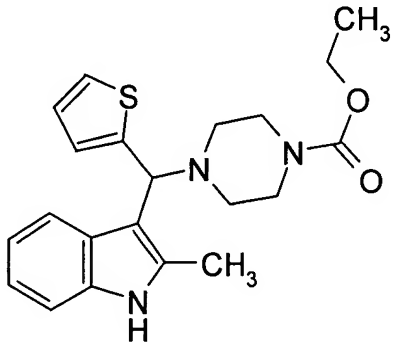
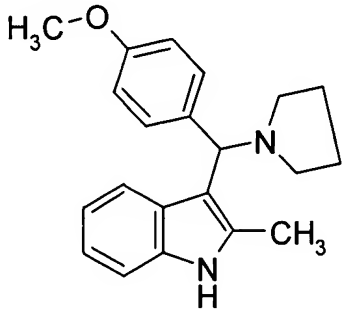
8. The compounds of the general formula C4 according to claim 7 for use in the medical field, namely compounds selected, for example, but not exclusively, from the following group C4 according to Table 4, and tautomers, stereoisomers of said compounds and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof:

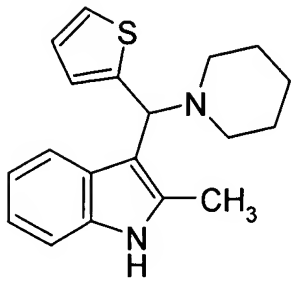
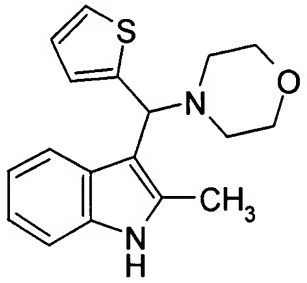
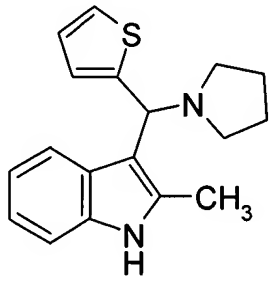
Table 4:

Compound ID.	Structure
C4.002	
C4.005	
C4.006	

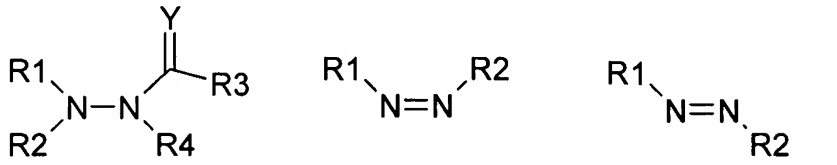
C4.007	
C4.008	
C4.009	
C4.010	
C4.011	

C4.012	

C4.013	
C4.014	
C4.015	
C4.016	

C4.017	
C4.018	
C4.019	

9. Compounds of the general formula C5



(a) (b) (c)

C5

wherein

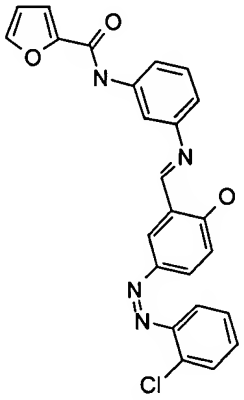
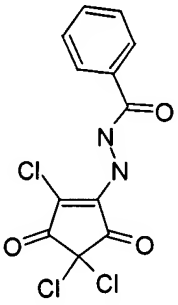
- Y may represent O, S, NH or NR5;

- R1 to R5 may be identical or different and are selected from the group consisting of hydrogen, unsubstituted or substituted, straight chain or branched C_1- to C_{12} alkyl, C_2- to C_{12} alkenyl and C_2- to C_{12} alkynyl, hydr-oxy, thiol, C_1- to C_{12} alkoxy, C_1- to C_{12} alkylthio, unsubstituted or substituted, uncondensed or condensed aryl and cycloalkyl optionally containing one or several hetero atoms from the group N, O, P and S, unsubstituted or substituted amino, unsubstituted or substituted carbonyl, unsubstituted or substituted thiocarbonyl and unsubstituted or substituted imino; and
- the heteroaromatic or heterocyclic residues are bound to the basic structure having the general formula C5 via a C atom or a hetero atom;

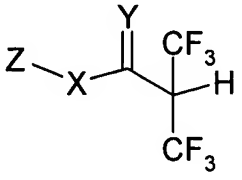
and tautomers, stereoisomers of the compounds of the general formula C5 and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof, for use in the medical field.

10. The compounds of the general formula C5 according to claim 9 for use in the medical field, namely compounds selected, for example, but not exclusively, from the following group C5 according to Table 5, and tautomers, stereoisomers of said compounds and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof:

Table 5:

Compound ID.	Structure
C5.001	
C5.002	

11. Compounds of the general formula C6



C6

wherein

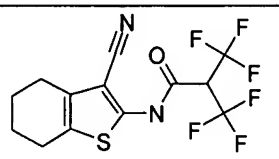
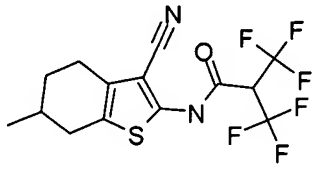
- Y represents O, S, NH or NR1;

- X and Z may be identical or different and independent of each other are selected from the group consisting of hydroxy, thiol, C_1- to C_8 alkoxy, C_1- to C_8 alkylthio, unsubstituted or substituted, uncondensed or condensed aryl and cycloalkyl optionally containing one or several hetero atoms from the group N, O, P and S and amino (NH2, NHR2, NR2R3);
- R1 to R3 may be identical or different and are selected from the group consisting of hydrogen, unsubstituted or substituted, straight chain or branched C_1- to C_{12} alkyl, C_2- to C_{12} alkenyl and C_2- to C_{12} alkynyl, hydr-oxy, thiol, C_1- to C_{12} alkoxy, C_1- to C_{12} alkylthio, unsubstituted or substituted, uncondensed or condensed aryl and cycloalkyl optionally containing one or several hetero atoms from the group N, O, P and S, unsubstituted or substituted amino, unsubstituted or substituted carbonyl, unsubstituted or substituted thiocarbonyl and unsubstituted or substituted imino; and
- the heteroaromatic or heterocyclic residues are bound to the basic structure having the general formula C6 via a C atom or a hetero atom;

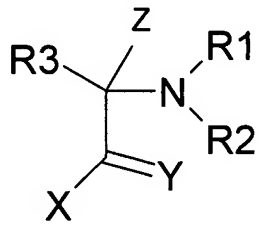
- and tautomers, stereoisomers of the compounds of the general formula C6 and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof, for use in the medical field.

12. The compounds of the general formula C6 according to claim 11 for use in the medical field, namely compounds selected, for example, but not exclusively, from the following group C6 according to Table 6, and tautomers, stereoisomers of said compounds and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof:

Table 6:

Compound ID.	Structure
C6.001	
C6.002	

13. Compounds of the general formula C7



C7

wherein

- Y represents O, S, NH or NR4;
- X and Z may be identical or different and independent of each other are selected from the group consisting of hydroxy, thiol, C_1- to C_8 alkoxy, C_1- to C_8 alkylthio, unsubstituted or substituted, uncondensed or condensed aryl and cycloalkyl optionally containing one or several hetero atoms from the group N, O, P and S and amino (NH2, NHR5, NR5R6);
- R1 to R6 may be identical or different and are selected from the group consisting of hydrogen, unsubstituted or substituted, straight chain or branched C_1- to C_{12} alkyl, C_2- to C_{12} alkenyl and C_2- to C_{12} alkynyl, hydr-oxy, thiol, C_1- to C_{12} alkoxy, C_1- to C_{12} alkylthio, unsubstituted or substituted, uncondensed or

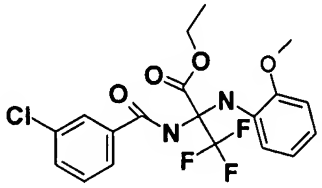
condensed aryl and cycloalkyl optionally containing one or several hetero atoms from the group N, O, P and S, unsubstituted or substituted amino, unsubstituted or substituted carbonyl, unsubstituted or substituted thiocarbonyl and unsubstituted or substituted imino; and

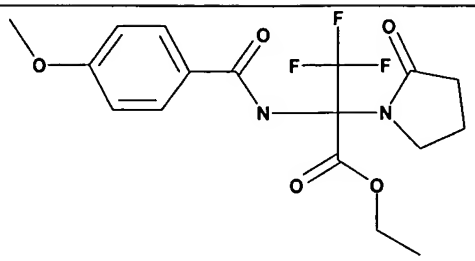
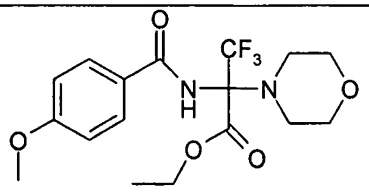
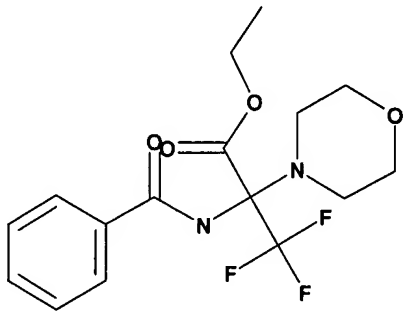
- the heteroaromatic or heterocyclic residues are bound to the basic structure having the general formula C7 via a C atom or a hetero atom;

and tautomers, stereoisomers of the compounds of the general formula C7 and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof, for use in the medical field.

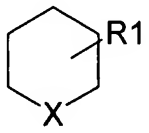
14. The compounds of the general formula C7 according to claim 13 for use in the medical field, namely compounds selected, for example, but not exclusively, from the following group C7 according to Table 7, and tautomers, stereoisomers of said compounds and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof:

Table 7:

Compound ID.	Structure
C7.001	

C7.002	
C7.003	
C7.004	

15. Compounds of the general formula C8



C8

wherein

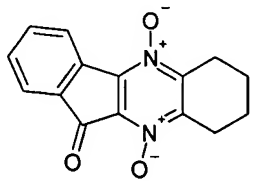
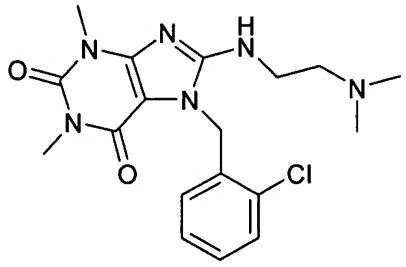
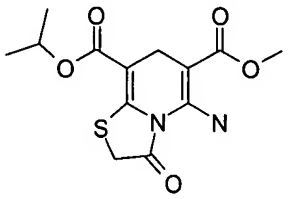
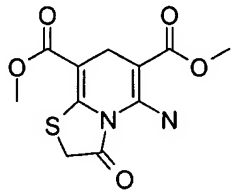
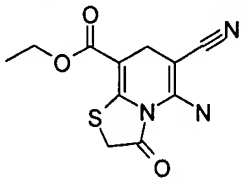
- X represents a hetero atom N, O, S or P or represents a functional group containing one of these hetero atomsas a ring atom;
- the basic six-membered ring structure may contain up to three further hetero atoms of the group X, wherein the hetero atoms may be identical or different;

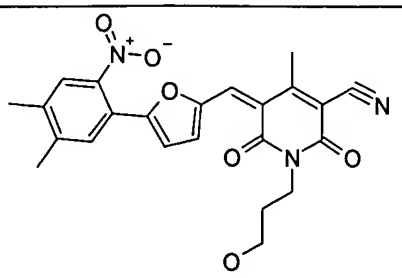
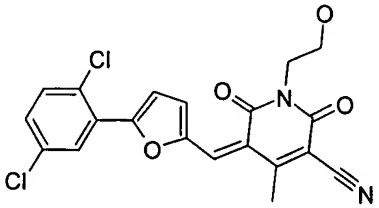
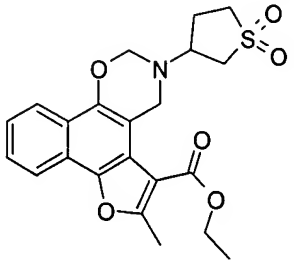
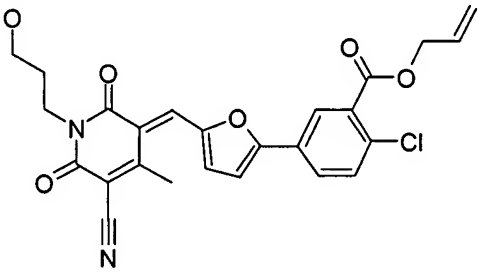
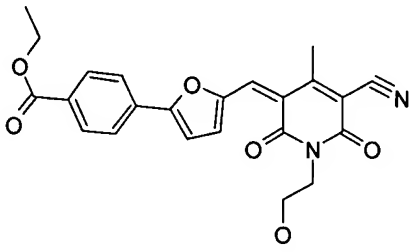
- the basic six-membered ring structure may contain zero to three double bonds;
- R1 symbolizes the substitution of the basic six-membered ring structure and represents one to ten substituents;
- R1 is selected from the group consisting of hydrogen, unsubstituted or substituted, straight chain or branched C_1- to C_{12} alkyl, C_2- to C_{12} alkenyl and C_2- to C_{12} alkynyl, hydroxy, thiol, C_1- to C_{12} alkoxy, C_1- to C_{12} alkylthio, unsubstituted or substituted, uncondensed or condensed aryl and cycloalkyl optionally containing one or several hetero atoms from the group N, O, P and S, unsubstituted or substituted amino, unsubstituted or substituted carbonyl, unsubstituted or substituted thiocarbonyl and unsubstituted or substituted imino; and
- the heteroaromatic or heterocyclic residues are bound to the basic structure having the general formula C8 via a C atom or a hetero atom;

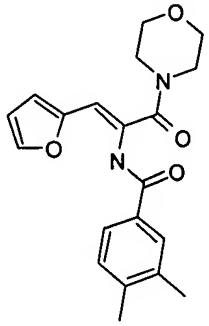
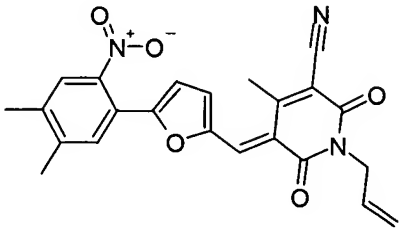
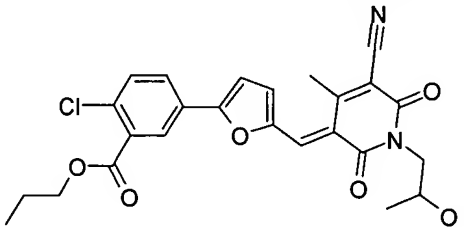
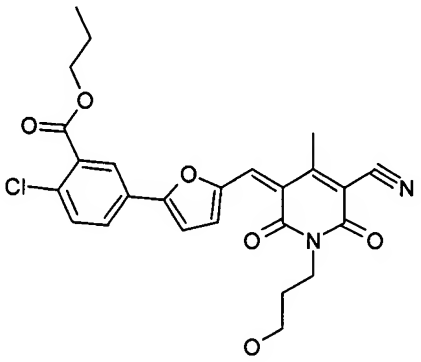
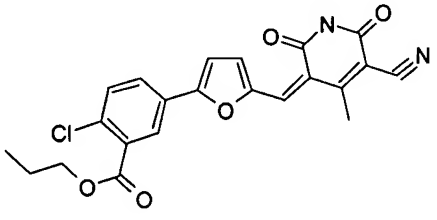
and tautomers, stereoisomers of the compounds of the general formula C8 and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof, for use in the medical field.

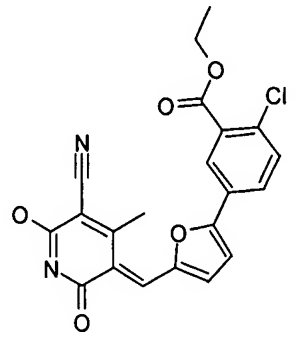
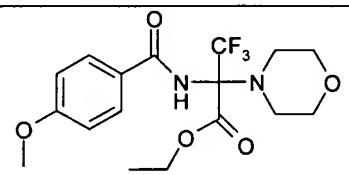
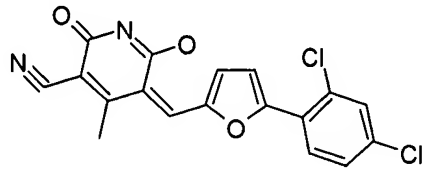
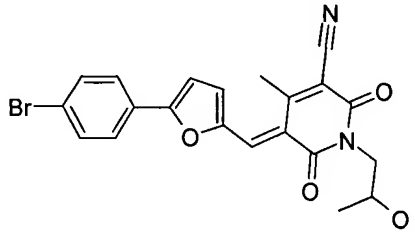
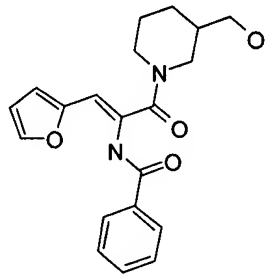
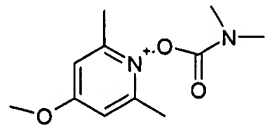
16. The compounds of the general formula C8 according to claim 15 for use in the medical field, namely compounds selected, for example, but not exclusively, from the following group C8 according to Table 8, and tautomers, stereoisomers of said compounds and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof:

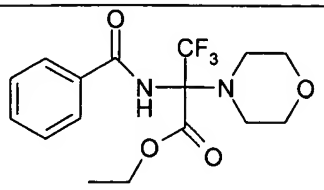
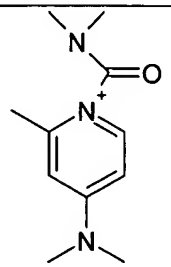
Table 8:

Compound ID	Structure
C8.001	
C8.002	
C8.003	
C8.004	
C8.005	

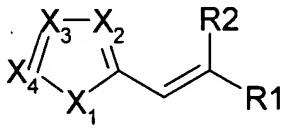
C8.006	
C8.007	
C8.008	
C8.009	
C8.010	

C8.011	
C8.012	
C8.013	
C8.014	
C8.015	

C8.016	
C8.017	
C8.018	
C8.019	
C8.020	
C8.021	

C8.022	
C8.023	

17. Compounds of the general formula C9



C9

wherein

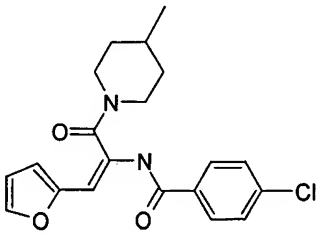
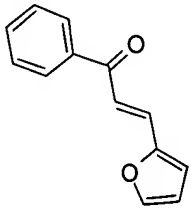
- X1 may represent CH_2, CHR3, CR3R4, NH, NR4, O or S;
- X2, X3 and X4 may represent CH, CR5 or N;
- R1 to R5 may be identical or different and are selected from the group consisting of hydrogen, unsubstituted or substituted, straight chain or branched C_1- to C_{12} alkyl, C_2- to C_{12} alkenyl and C_2- to C_{12} alkynyl, hydr-oxy, thiol, C_1- to C_{12} alkoxy, C_1- to C_{12} alkylthio, unsubstituted or substituted, uncondensed or condensed aryl and cycloalkyl optionally containing one or several hetero atoms from the group N, O, P and S, unsubstituted or substituted amino, unsubstituted or substituted carbonyl, unsubstituted or substituted thiocarbonyl and unsubstituted or substituted imino;
- the heteroaromatic or heterocyclic residues are bound to the basic structure having the general formula C9 via a C atom or a hetero atom; and

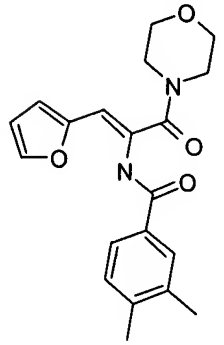
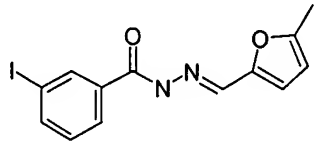
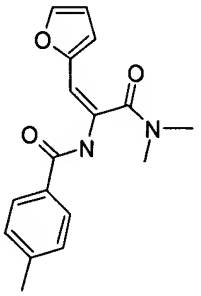
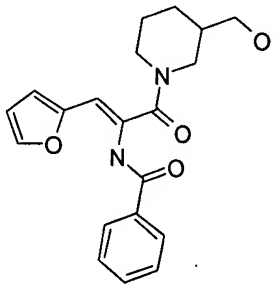
- the basic six-membered ring structure may contain zero to three double bonds;

and tautomers, stereoisomers of the compounds of the general formula C9 and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoiso-mers thereof, for use in the medical field.

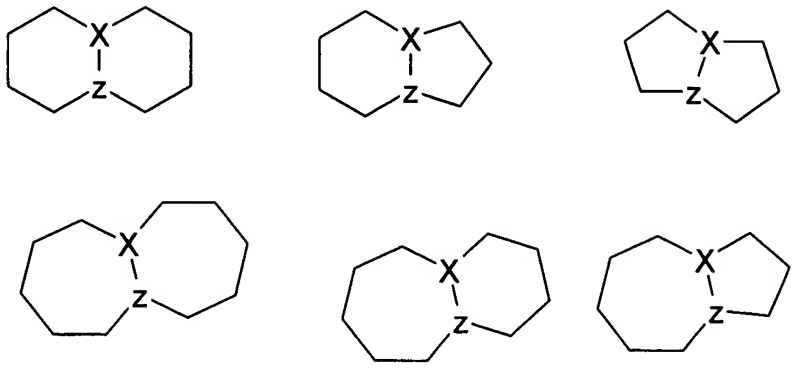
18. The compounds of the general formula C9 according to claim 17 for use in the medical field, namely compounds selected, for example, but not exclusively, from the following group C9 according to Table 9, and tautomers, stereoisomers of said compounds and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof:

Table 9:

Compound ID.	Structure
C9.001	
C9.002	

C9.003	
C9.004	
C9.005	
C9.006	

19. Compounds of the general formulae C10



C10

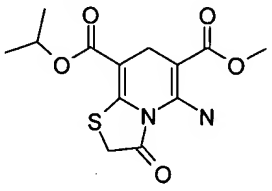
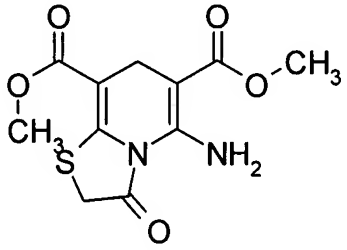
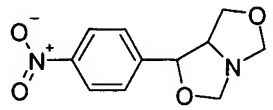
wherein

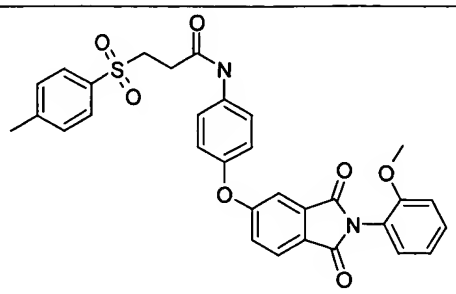
- X and Z may represent CH, CR1 or N and at least one of the two groups represents or has a hetero atom of the basic structure;
- The partial rings may be substituted or unsubstituted, condensed or noncondensed and may contain zero to three double bonds and further hetero atoms and hetero atom-containing groups corresponding to the definitions for X and Z,
- R1 is selectrd from the group consisting of hydrogen, unsubstituted or substituted, straight chain or branched C_1- to C_{12}- alkyl, C_2- to C_{12} alkenyl and C_2- to C_{12} alkynyl, hydroxy, thiol, C_1- to C_{12} alkoxy, C_1- to C_{12} alkylthio, unsubstitted or substituted, uncondensed or condensed aryl and cycloalkyl optionally containing one or several hetero atoms from the group N, O, P and S, unsubstituted or substituted amino, unsubstituted or substituted carbonyl, unsubstituted or substituted thiocarbonyl and unsubstituted oder substituted imino;
- the heteroaromatic or heterocyclic residues are bound to the basic structure having the general formula C10 via a C atom or a hetero atom; and
- the basic ring structure may contain zero to three double bonds;

and tautomers, stereoisomers of the compounds of the general formula C10 and pharmaceutically acceptable salts, salt derivatives, tautomers and stereo-isomers thereof, for use in the medical field.

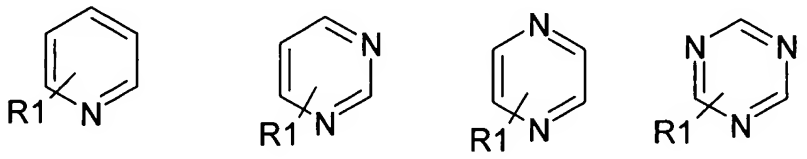
20. The compounds of the general formula C10 according to claim 19 for use in the medical field, namely compounds selected, for example, but not exclusively, from the following group C10 according to Table 10, and tautomers, stereo-isomers of said compounds and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof:

Table 10:

Compound ID.	Structure
C10.003	
C10.005	
C10.012	

C10.015	

21. Compounds of the general formulae C11



(a) (b) (c) (d) C11

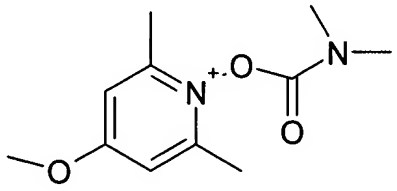
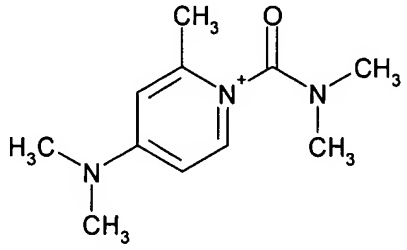
wherein

- R1 represents the substitution pattern of the basic heteroaromatic structure consisting of up to five identical or different substituents, R1 being selected from the group consisting of hydrogen, unsubstituted or substituted, straight chain or branched C_1- to C_{12} alkyl, C_2- to C_{12} alkenyl and C_2- to C_{12} alkynyl, hydroxy, thiol, C_1- to C_{12} alkoxy, C_1- to C_{12} alkylthio, unsubstituted or substituted, uncondensed or condensed aryl and cycloalkyl optionally containing one or several hetero atoms from the group N, O, P and S, unsubstituted or substituted amino, unsubstituted or substituted carbonyl, unsubstituted or substituted thiocarbonyl and unsubstituted or substituted imino; and
- the heteroaromatic or heterocyclic residues are bound to the basic structure having the general formula C11 via a C atom or a hetero atom;

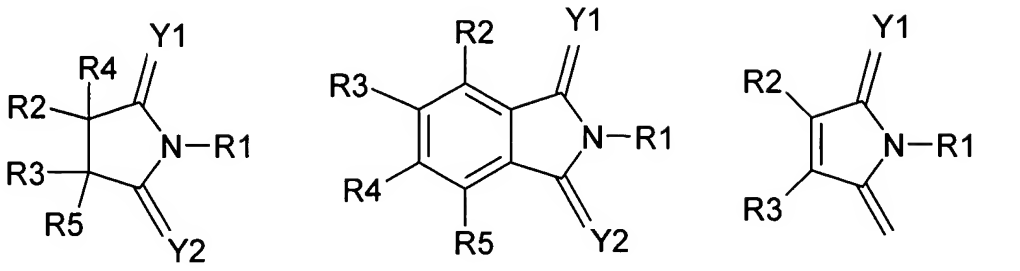
and tautomers, stereoisomers of the compounds of the general formula C11 and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof, for use in the medical field.

22. The compounds of the general formula C11 according to claim 21 for use in the medical field, namely compounds selected, for example, but not exclusively, from the following group C11 according to Table 11, and tautomers, stereoisomers of said compounds and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof:

Table 11:

Compound ID.	**Structure**
C11.001	
C11.002	

23. Compounds of the general formulae C12



(a) (b) (c)

C12

wherein

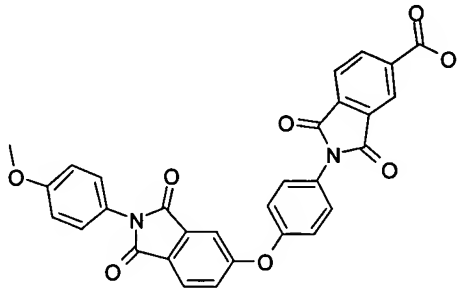
- Y1 and Y2 may be identical or different and represent O, S, NH or NR6;
- R1 to R6 may be identical or different and are selected from the group consisting of hydrogen, unsubstituted or substituted, straight chain or branched C_1- to C_{12} alkyl, C_2- to C_{12} alkenyl and C_2- to C_{12} alkynyl, hydr-oxy, thiol, C_1- to C_{12} alkoxy, C_1- to C_{12} alkylthio, unsubstituted or substituted, uncondensed or condensed aryl and cycloalkyl optionally containing one or several hetero atoms from the group N, O, P and S, unsubstituted or substituted amino, unsubstituted or substituted carbonyl, unsubstituted or substituted thiocarbonyl and unsubstituted or substituted imino; and
- the heteroaromatic or heterocyclic residues are bound to the basic structure having the general formula C12 via a C atom or a hetero atom;

and tautomers, stereoisomers of the compounds of the general formula C12 and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof, for use in the medical field.

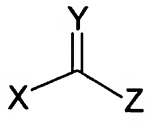
24. The compounds of the general formula C12 according to claim 23 for use in the medical field, namely compounds selected, for example, but not exclusively, from the following group C12 according to Table 12, and tautomers, stereoisomers of

said compounds and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof:

Table 12:

Compound ID.	Structure
C12.001	

25. Compounds of the general formula C13

 C13

wherein

- X and Z may be identical or different and independent of each other are selected from the group consisting of hydroxy, thiol, C_1- to C_8 alkoxy, C_1- to C_8 alkylthio, unsubstituted or substituted, uncondensed or condensed aryl and cycloalkyl optionally containing one or several hetero atoms from the group N, O, P and S and amino (NH_2, NHR1, NR1R2);
- Y represents O, S, NH or NR3;
- R1 to R3 may be identical or different and are selected from the group consisting of hydrogen, unsubstituted or substituted, straight chain or branched C_1- to C_{12} alkyl, C_2- to C_{12} alkenyl and C_2- to C_{12} alkynyl, hydr-oxy, thiol, C_1- to C_{12} alkoxy, C_1- to C_{12} alkylthio, unsubstituted or substituted, uncondensed or

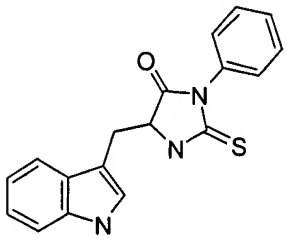
condensed aryl and cycloalkyl optionally containing one or several hetero atoms from the group N, O, P and S, unsubstituted or substituted amino, unsubstituted or substituted carbonyl, unsubstituted or substituted thiocarbonyl and unsubstituted or substituted imino; and

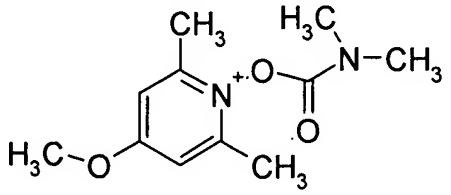
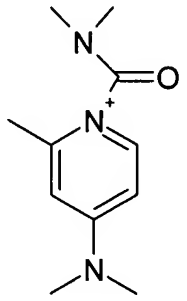
- the heteroaromatic or heterocyclic residues are bound to the basic structure having the general formula C13 via a C atom or a hetero atom;

and tautomers, stereoisomers of the compounds of the general formula C13 and pharmaceutically acceptable salts, salt derivatives, tautomers and stereo-isomers thereof, for use in the medical field.

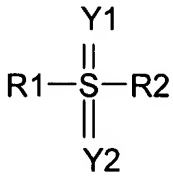
26. The compounds of the general formula C13 according to claim 25 for use in the medical field, namely compounds selected, for example, but not exclusively, from the following group C13 according to Table 13, and tautomers, stereo-isomers of said compounds and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof:

Table 13:

Compound ID.	Structure
C13.001	

C13.002	
C13.003	

27. Compounds of the general formula C14



C14

wherein

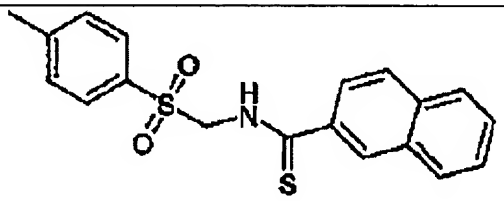
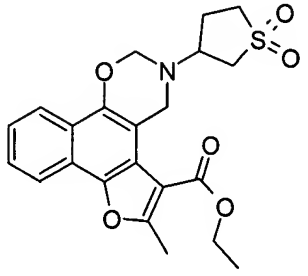
- Y1 and Y2 may be identical or different and represent O, S, NH or NR3;
- R1 to R3 may be identical or different and are selected from the group consisting of hydrogen, unsubstituted or substituted, straight chain or branched C_1- to C_{12} alkyl, C_2- to C_{12} alkenyl and C_2- to C_{12} alkynyl, hydr-oxy, thiol, C_1- to C_{12} alkoxy, C_1- to C_{12} alkylthio, unsubstitted or substituted, uncondensed or condensed aryl and cycloalkyl optionally containing one or several hetero atoms from the group N, O, P and S, unsubstituted or substituted amino, unsubstituted or substituted carbonyl, unsubstituted or substituted thiocarbonyl and unsubstituted or substituted imino; and

- the heteroaromatic or heterocyclic residues are bound to the basic structure having the general formula C14 via a C atom or a hetero atom;

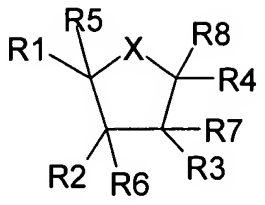
and tautomers, stereoisomers of the compounds of the general formula C14 and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof, for use in the medical field.

28. The compounds of the general formula C14 according to claim 27 for use in the medical field, namely compounds selected, for example, but not exclusively, from the following group C14 according to Table 14, and tautomers, stereoisomers of said compounds and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof:

Table 14:

Compound ID.	**Structure**
C14.001	
C14.002	

29. Compounds of the general formula C15



C15

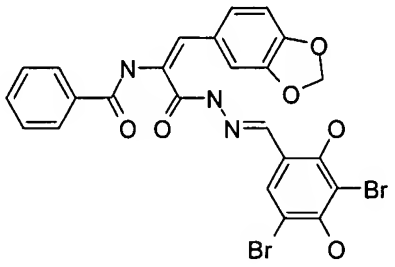
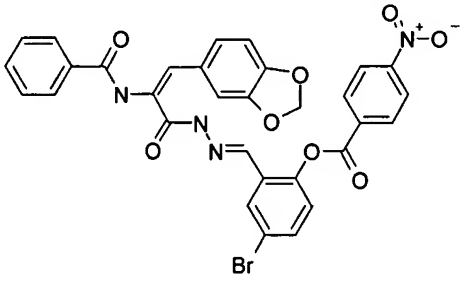
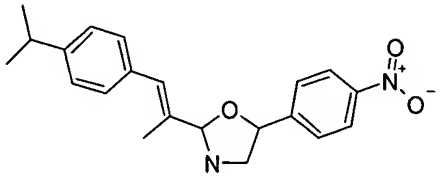
wherein

- X represents O, S, NH or NR9;
- R1 to R9 may be identical or different and are selected from the group consisting of hydrogen, unsubstituted or substituted, straight chain or branched C1- to C12 alkyl, C2- to C12 alkenyl and C2- to C12 alkynyl, hydroxy, thiol, C1- to C12 alkoxy, C1- to C12 alkylthio, unsubstituted or substituted, uncondensed or condensed aryl and cycloalkyl optionally containing one or several hetero atoms from the group N, O, P and S, unsubstituted or substituted amino, unsubstituted or substituted carbonyl, unsubstituted or substituted thiocarbonyl and unsubstituted or substituted imino; and
- the heteroaromatic or heterocyclic residues are bound to the basic structure having the general formula C15 via a C atom or a hetero atom;

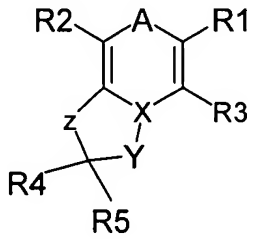
and tautomers, stereoisomers of the compounds of the general formula C15 and pharmaceutically acceptable salts, salt derivatives, tautomers and stereo isomers thereof, for use in the medical field.

30. The compounds of the general formula C15 according to claim 29 for use in the medical field, namely compounds selected, for example, but not exclusively, from the following group C15 according to Table 15, and tautomers, stereo-isomers of said compounds and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof:

Table 15:

Compound ID.	Structure
C15.002	
C15.003	
C15.004	

30a. Compounds of the general formula C16



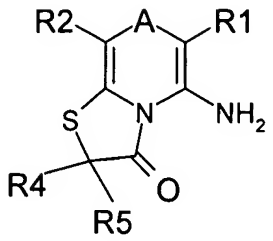
C16

wherein

- R1 to R5 may be identical or different and are selected independently of each other and represent hydrogen, CH_3, CH_2R6, CHR6R7, CR6R7R8 OH, OR6, NH_2, NHR6, NR6R7, C(O)R6, C(NH)R6, C(NR7)R6, C(S)R6, PH_2, PHR6, P(R6)R7, $P(O)(OH)_2$, P(O)(OH)(OR6), P(O)(OR6)(OR7) and CN;
- A, Y and Z may be identical or different and are selected independently of each other and represent CH_2, CHR9, CR9R10, C(O), C(S), C(NH), C(NR9), NH, NR9, NOH, NOR9, O, S, SO_2, PH, PR9, P(O)OH, P(O)OR9, $P(OH)_3$, $P(OH)_2POR9$, P(OH)(OR9)(OR10), P(OR9)(OR10)-(OR11);
- X represents N, CH, CR12, P, P=O, $P(OH)_2$, P(OH)(OR12) or P(OR12)(OR13);
- R6 to R13 may be identical or different and are selected independent of each other from the group consisting of hydrogen, unsubstituted or substituted, straight chain or branched C_1- to C_{12} alkyl, C_2- to C_{12} alkenyl and C_2- to C_{12} alkynyl, hydroxy, thiol, C_1- to C_{12} alkoxy, C_1- to C_{12} alkylthio, unsubstituted or substituted, uncondensed or condensed aryl and cycloalkyl optionally containing one or several hetero atoms from the group N, O, P and S, unsubstituted or substituted amino, unsubstituted or substituted carbonyl, unsubstituted or substituted thiocarbonyl and unsubstituted or substituted imino;
- the heteroaromatic or heterocyclic residues are bound to the basic structure having the general formula C16 via a C atom or a hetero atom;

and tautomers, stereoisomers of the compounds of the general formula C16 and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof, for use in the medical field.

30b. The compounds according to claim 30a having the following basic structure



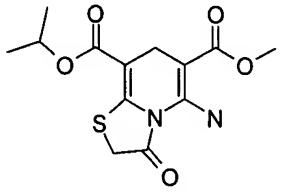
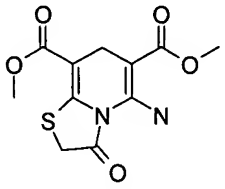
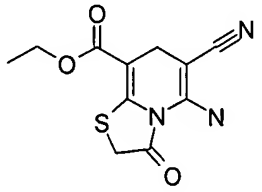
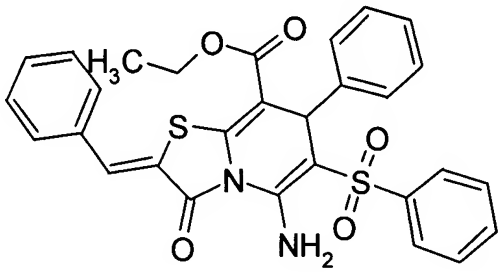
wherein

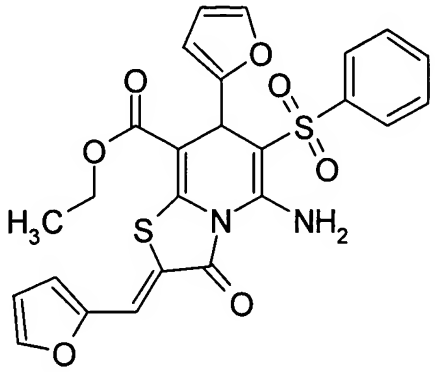
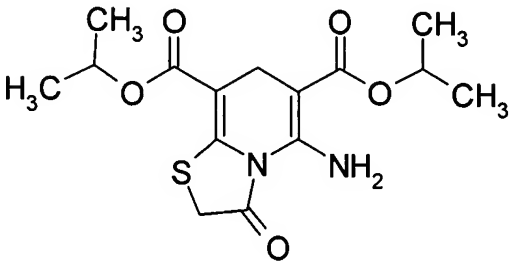
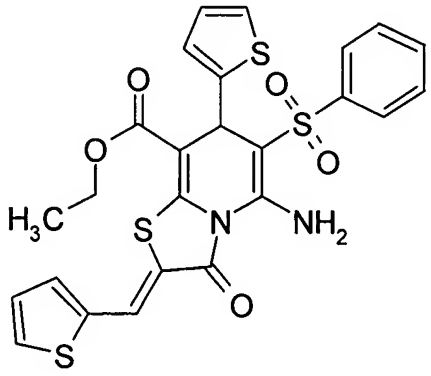
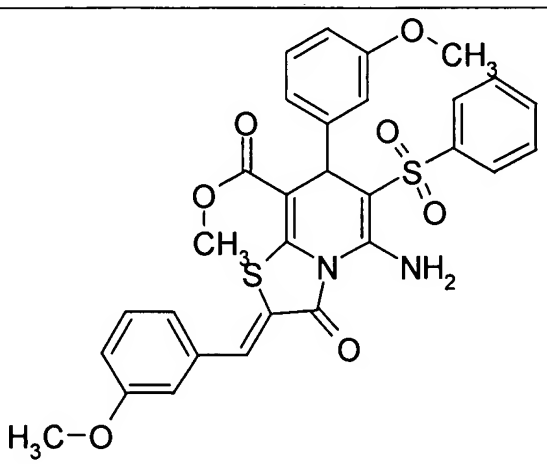
- R1 to R5 may be identical or different and are selected independently of each other and represent hydrogen, CH_3, CH_2R6, CHR6R7, CR6R7R8 OH, OR6, NH_2, NHR6, NR6R7, C(O)R6, C(NH)R6, C(NR7)R6, C(S)R6, PH_2, PHR6, P(R6)R7, $P(O)(OH)_2$, P(O)(OH)(OR6), P(O)(OR6)(OR7) and CN;
- A represents CH_2, CHR9, CR9R10, C(O), C(S), NH, NR9, NOH, NOR9, O, S, SO_2, PH, PR9, P(O)OH, P(O)OR9, $P(OH)_3$, $P(OH)_2POR9$, P(OH)(OR9)(OR10), P(OR9)(OR10)(OR11);
- R6 to R13 may be identical or different and independent of each other are selected from the group consisting of hydrogen, unsubstituted or substituted, straight chain or branched C_1- to C_{12} alkyl, C_2- to C_{12} alkenyl and C_2- to C_{12} alkynyl, hydroxy, thiol, C_1- to C_{12} alkoxy, C_1- to C_{12} alkylthio, unsubstituted or substituted, uncondensed or condensed aryl and cycloalkyl optionally containing one or several hetero atoms from the group N, O, P and S, unsubstituted or substituted amino, unsubstituted or substituted carbonyl, unsubstituted or substituted thiocarbonyl and unsubstituted or substituted imino;

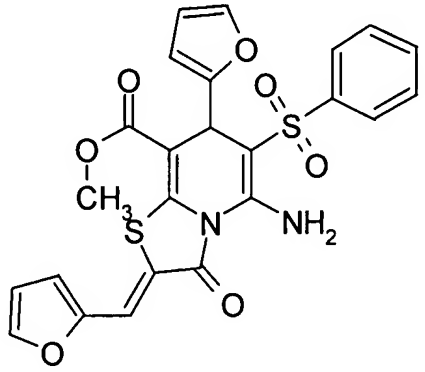
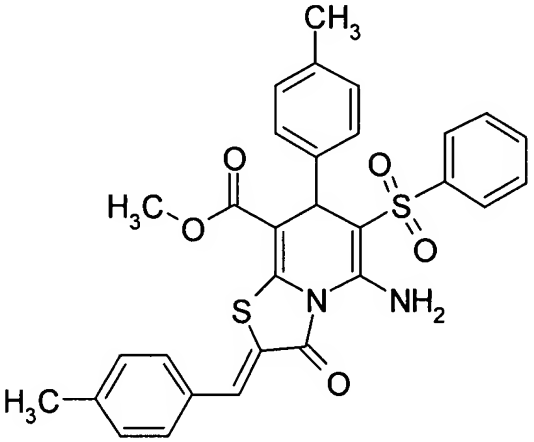
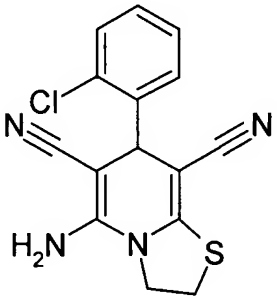
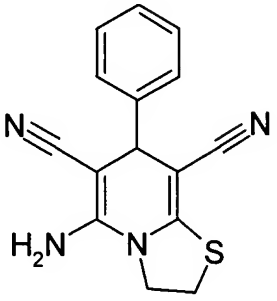
and tautomers, stereoisomers of the compounds of the general formula 30a indicated above and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof, for use in the medical field.

30c. The compounds of claims 30a and 30b for use in the medical field, namely compounds selected, for example, but not exclusively, from the following group C16 according to Table 16, and tautomers, stereoisomers of said compounds and pharmaceutically acceptable salts, salt derivatives, tautomers and stereoisomers thereof:

Table 16:

Compound ID.	Structure
C16.001	
C16.003	
C16.004	
C16.005	

C16.006	
C16.007	
C16.008	
C16.009	

C16.010	
C16.011	
C16.012	
C16.013	

31. A pharmaceutical composition, comprising at least one compound of any of the preceding claims 1 to 30c, optionally in combination with usual carriers and/or adjuvants.

32. A cosmetic composition, comprising at least one compound of any of the preceding claims 1 to 30c, optionally in combination with usual carriers and/or adjuvants.

33. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for inhibiting the activity of alanyl aminopeptidases and of dipeptidyl peptidase IV or of analogous enzymes.

34. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for topically influencing the activity of alanyl aminopeptidases and of dipeptidyl peptidase IV or of analogous enzymes.

35. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for a prophylaxis and therapy of multiple sclerosis, Morbus Crohn, Colitis ulcerosa, rheumatoid arthritis, diabetes type I, autoimmune thyroid gland diseases, Morbus Wegener, Systemic Lupus erythematosus visceralis and other autoimmune diseases as well as of inflammatory diseases.

36. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for a prophylaxis and therapy of allergic asthma bronchiale, allergic rhinitis, food allergies, atopic eczema, contact dermatitis, urticaria, angioedema and other allergic diseases.

37. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for a prophylaxis and therapy of a rejection of allogenic or xenogenic transplanted organs, tissues and cells as, for example, kidney, heart, liver, pancreas, skin or stem cell transplants as well as of graft-versus-host diseases.

38. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for a prophylaxis and therapy of skin and mucosa diseases as, for example, psoriasis, acne as well as of dermatologic diseases associated with a hyperproliferation and changed differentiation states of fibroblasts (inter alia benign fibrosing and sclerosing skin diseases and malign fibroblastar hyperproliferation states).

39. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for a prophylaxis and therapy of acute neuronal diseases, in particular ischemia-caused cerebral damage after a ischemic or hemorrhagic stroke, craniocerebral trauma, cardiac arrest, myocardial infarct or as a consequence of heart surgery.

40. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for a prophylaxis and therapy of chronic neuronal diseases, in particular Morbus Alzheimer, Pick's disease, of the Progressive Supranuclear Palsy, of a cortical degeneration, of the frontotemporal dementia, of Morbus Parkinson, of Morbus Huntington, of prion-caused diseases and of the amyotrophic lateral sclerosis.

41. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for a prophylaxis and therapy of atherosclerosis, arterial inflammation, reperfusion syndrome and

stent restenosis, for example after a percutaneous transluminal angioplasty, also in the form of medicament-coated stents.

42. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for a prophylaxis and therapy of inflammation reactions at, or caused by, medical-technical devices implanted into the organism (medical devices).

43. Use according to claim 42 in the form of a coating or a layer on the devices or a substance admixture of at least one of the compounds or compositions to the material of the devices or in the form of a local or systemic administration either successively or parallel in time.

44. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for a prophylaxis and therapy of chronic obstructive pulmonal diseases (Chronische Obstruktive Lungenerkrankungen; COPD).

45. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for a prophylaxis and therapy of prostata carcinoma and other tumors as well as of metastases.

46. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for a prophylaxis and therapy of the Heavy Acute Respiratoty Syndrome (Schweres Akutes Respiratorisches Syndrom; SARS).

47. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for a prophylaxis and therapy of sepsis and sepsis-like conditions.

48. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for the manufacture of a medicament for inhibiting the activity of alanyl aminopeptidases and of dipeptidyl peptidase IV or of analogous enzymes.

49. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for the manufacture of a medicament for topically influencing the activity of alanyl aminopeptidases and of dipeptidyl peptidase IV or of analogous enzymes.

50. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for the manufacture of a medicament for a prophylaxis and therapy of multiple sclerosis, Morbus Crohn, Colitis ulcerosa, rheumatoid arthritis, diabetes type I, autoimmune thyroid gland diseases, Morbus Wegener, Systemic Lupus erythematosus visceralis and other autoimmune diseases as well as of inflammatory diseases.

51. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for the manufacture of a medicament for a prophylaxis and therapy of allergic asthma bronchiale, allergic rhinitis, food allergies, atopic eczema, contact dermatitis, urticaria, angioedema and other allergic diseases.

52. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for the manufacture of a medicament for a prophylaxis and therapy of a rejection of allogenic or xenogenic transplanted organs, tissues and cells as, for example, kidney, heart, liver, pancreas, skin or stem cell transplants as well as of graft-versus-host diseases.

53. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for the manufacture of a medicament for a prophylaxis and therapy of skin and mucosa diseases as, for example, psoriasis, acne as well as of dermatologic diseases associated with a hyperproliferation and changed differentiation states of fibroblasts (inter alia benign fibrosing and sclerosing skin diseases and malign fibroblastar hyperproliferation states).

54. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for the manufacture of a medicament for a prophylaxis and therapy of acute neuronal diseases, in particular ischemia-caused cerebral damage after a ischemic or hemorrhagic stroke, craniocerebral trauma, cardiac arrest, myocardial infarct or as a consequence of heart surgery.

55. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for the manufacture of a medicament for a prophylaxis and therapy of chronic neuronal diseases, in particular Morbus Alzheimer, Pick's disease, of the Progressive Supranuclear Palsy, of a cortical degeneration, of the frontotemporal dementia, of Morbus Parkinson, of Morbus Huntington, of prion-caused diseases and of the amyotrophic lateral sclerosis.

56. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for the manufacture of a medicament for a prophylaxis and therapy of atherosclerosis, arterial inflammation, reperfusion syndrome and stent restenosis, for example after a percutaneous transluminal angioplasty, also in the form of medicament-coated stents.

57. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for the manufacture of a medicament for a prophylaxis and therapy of inflammation reactions at, or caused by, medical-technical devices implanted into the organism (medical devices).

58. Use according to claim 57 in the form of a coating or a layer on the devices or a substance admixture of at least one of the compounds or compositions to the material of the devices or in the form of a local or systemic administration either successively or parallel in time.

59. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for the manufacture of a medicament for a prophylaxis and therapy of chronic obstructive pulmonal diseases (Chronische Obstruktive Lungenerkrankungen; COPD).

60. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for the manufacture of a medicament for a prophylaxis and therapy of prostata carcinoma and other tumors as well as of metastases.

61. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for the manufacture of a medicament for a prophylaxis and therapy of the Heavy Acute Respiratoty Syndrome (Schweres Akutes Respiratorisches Syndrom; SARS).

62. Use of at least one compound or of a pharmaceutical or cosmetic composition according to any of the preceding claims 1 to 30c, 31 and 32 for the manufacture of a medicament for a prophylaxis and therapy of sepsis and sepsis-like conditions.

63. A process for inhibiting the activity of alanyl aminopeptidases and of dipeptidyl peptidase IV or of analogous enzymes by an administration of at least one compound or of a pharmaceutical or cosmetic composition according to one of the preceding claims 1 to 30c, 31 and 32 in an amount required for an inhibition of the enzymatic action.

64. A process for topically influencing the activity of alanyl aminopeptidases and of dipeptidyl peptidase IV or of analogous enzymes by an administration of at least one compound or of a pharmaceutical or cosmetic composition according to one of the preceding claims 1 to 30c, 31 and 32 in an amount required for an inhibition of the enzymatic action.

65. A process for a prophylaxis and therapy of multiple sclerosis, Morbus Crohn, Colitis ulcerosa, rheumatoid arthritis, diabetes type I, autoimmune thyroid gland diseases, Morbus Wegener, systemic Lupus erythematosus visceralis and other autoimmune diseases as well as of inflammatory diseases by an administration of at least one compound or of a pharmaceutical or cosmetic composition according to one of the preceding claims 1 to 30c, 31 and 32 in an amount required for a prophylaxis or therapy.

66. A process for a prophylaxis and therapy of allergic asthma bronchiale, allergic rhinitis, food allergies, atopic ekzema, contact dermatitis, urticaria, angioedema and other allergic diseases by an administration of at least one compound or of a pharmaceutical or cosmetic composition according to one of the preceding claims 1 to 30c, 31 and 32 in an amount required for a prophylaxis or therapy.

67. A process for a prophylaxis and therapy of a rejection of allogenic or xenogenic transplanted organs, tissues and cells as, for example, kidney, heart, liver, pancreas, skin or stem cell transplants as well as of graft-versus-host diseases by an administration of at least one compound or of a pharmaceutical or cosmetic

composition according to one of the preceding claims 1 to 30c, 31 and 32 in an amount required for a prophylaxis or therapy.

68. A process for a prophylaxis and therapy of skin and mucosa diseases as, for example, psoriasis, acne as well as of dermatologic diseases associated with a hyperproliferation and changed differentiation states of fibroblasts (inter alia benign fibrosing and sclerosing skin diseases and malign fibroblastar hyperproliferation states) by an administration of at least one compound or of a pharmaceutical or cosmetic composition according to one of the preceding claims 1 to 30c, 31 and 32 in an amount required for a prophylaxis or therapy.

69. A process for a prophylaxis and therapy of acute neuronal diseases, in particular ischemia-caused cerebral damage after a ischemic or hemorrhagic stroke, craniocerebral trauma, cardiac arrest, myocardial infarct or as a consequence of heart surgery by an administration of at least one compound or of a pharmaceutical or cosmetic composition according to one of the preceding claims 1 to 30c, 31 and 32 in an amount required for a prophylaxis or therapy.

70. A process for a prophylaxis and therapy of chronic neuronal diseases, in particular Morbus Alzheimer, Pick's disease, of the Progressive Supranuclear Palsy, of a cortical degeneration, of the frontotemporal dementia, of Morbus Parkinson, of Morbus Huntington, of prion-caused diseases and of the amyotrophic lateral sclerosis by an administration of at least one compound or of a pharmaceutical or cosmetic composition according to one of the preceding claims 1 to 30c, 31 and 32 in an amount required for a prophylaxis or therapy.

71. A process for a prophylaxis and therapy of atherosclerosis, arterial inflammation, reperfusion syndrome and stent restenosis, for example after a percutaneous transluminal angioplasty, also in the form of medicament-coated stents, by an administration of at least one compound or of a pharmaceutical or cosmetic

composition according to one of the preceding claims 1 to 30c, 31 and 32 in an amount required for a prophylaxis or therapy.

72. A process for a prophylaxis and therapy of inflammation reactions at, or caused by, medical-technical devices implanted into the organism (medical devices) by an administration of at least one compound or of a pharmaceutical or cosmetic composition according to one of the preceding claims 1 to 30c, 31 and 32 in an amount required for a prophylaxis or therapy.

73. The process according to claim 72 in the form of a coating or a layer on the devices or a substance admixture of at least one of the compounds or compositions to the material of the devices or in the form of a local or systemic administration either successively or parallel in time.

74. A process for a prophylaxis and therapy of chronic obstructive pulmonal diseases (Chronische Obstruktive Lungenerkrankungen; COPD) by an administration of at least one compound or of a pharmaceutical or cosmetic composition according to one of the preceding claims 1 to 30c, 31 and 32 in an amount required for a prophylaxis or therapy.

75. A process for a prophylaxis and therapy of prostata carcinoma and other tumors as well as of metastases by an administration of at least one compound or of a pharmaceutical or cosmetic composition according to one of the preceding claims 1 to 30c, 31 and 32 in an amount required for a prophylaxis or therapy.

76. A process for a prophylaxis and therapy of the Heavy Acute Respiratoty Syndrome (Schweres Akutes Respiratorisches Syndrom; SARS) by an administration of at least one compound or of a pharmaceutical or cosmetic composition according to one of the preceding claims 1 to 30c, 31 and 32 in an amount required for a prophylaxis or therapy.

77. A process for a prophylaxis and therapy of sepsis and sepsis-like conditions by an administration of at least one compound or of a pharmaceutical or cosmetic composition according to one of the preceding claims 1 to 30c, 31 and 32 in an amount required for a prophylaxis or therapy.